

FIG. 1A

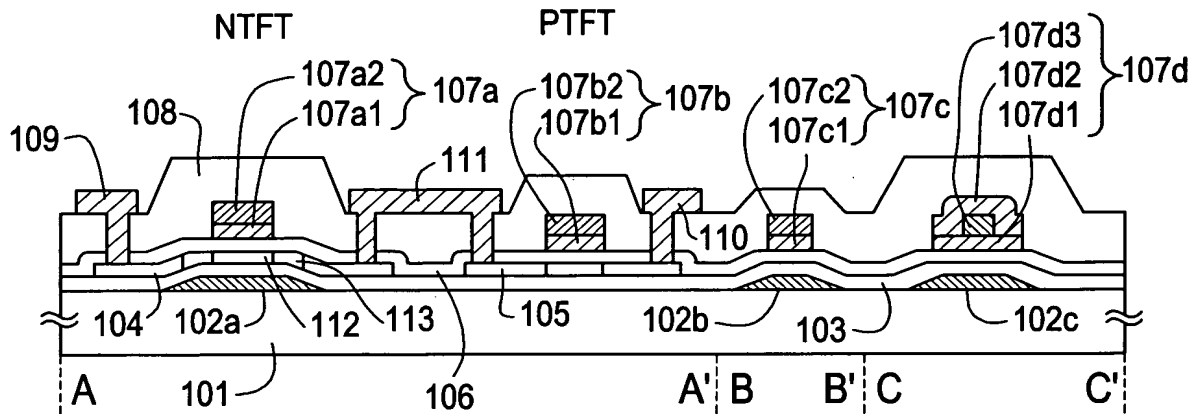


FIG. 1B

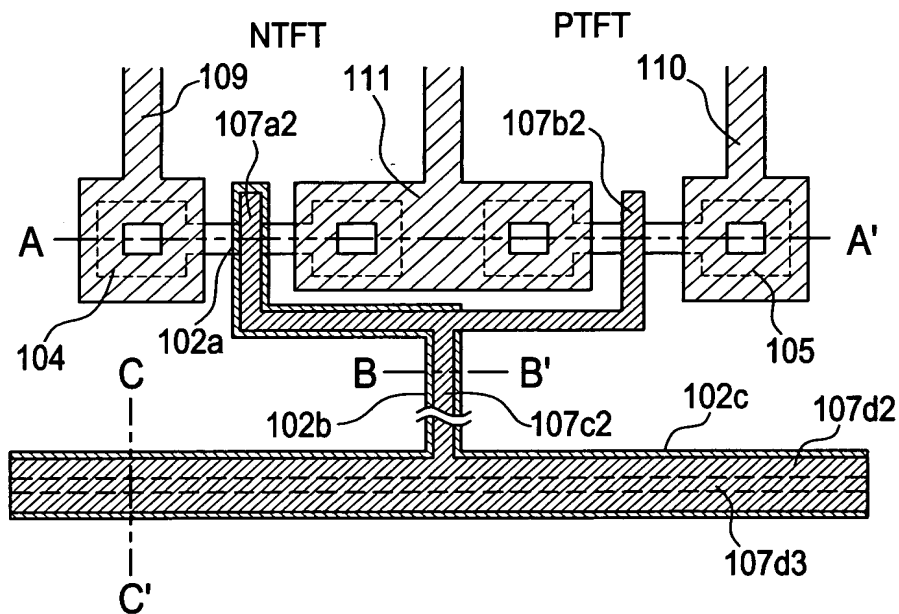


FIG. 2A

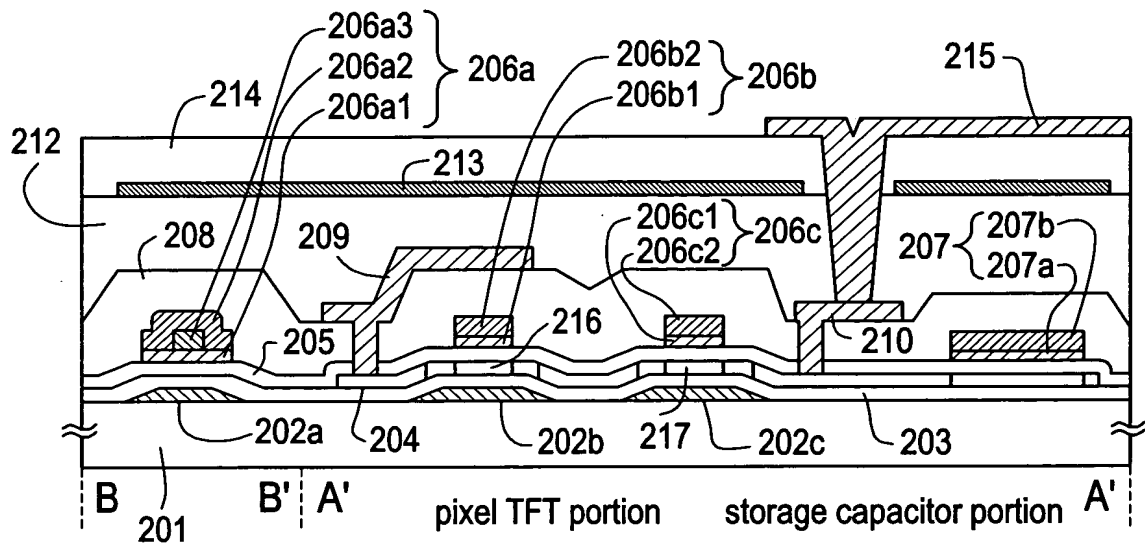


FIG. 2B

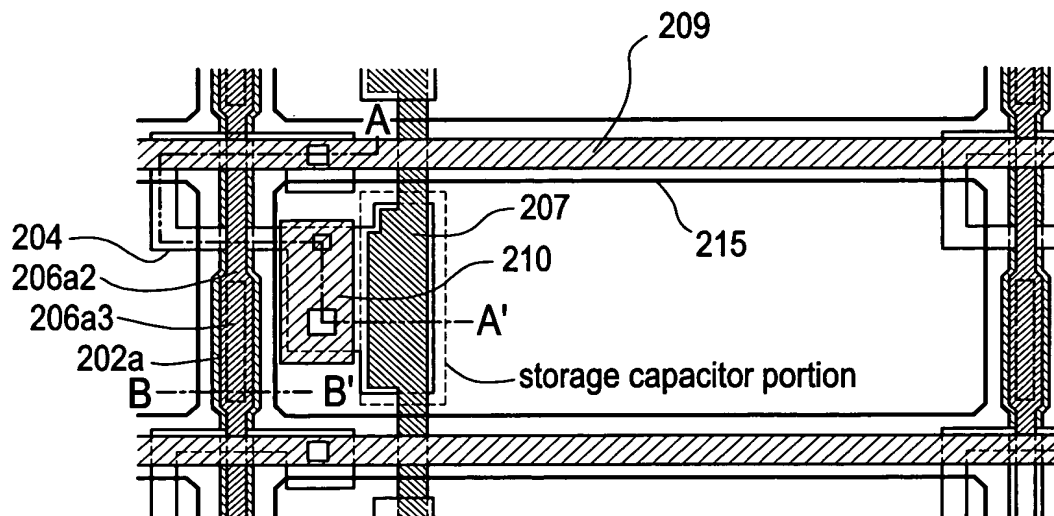


FIG. 3A

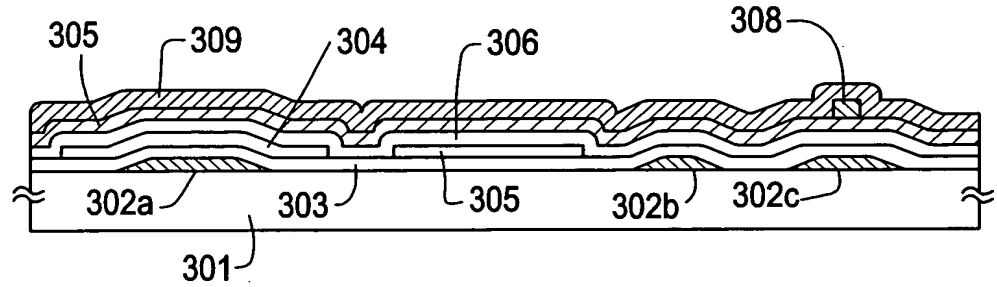


FIG. 3B

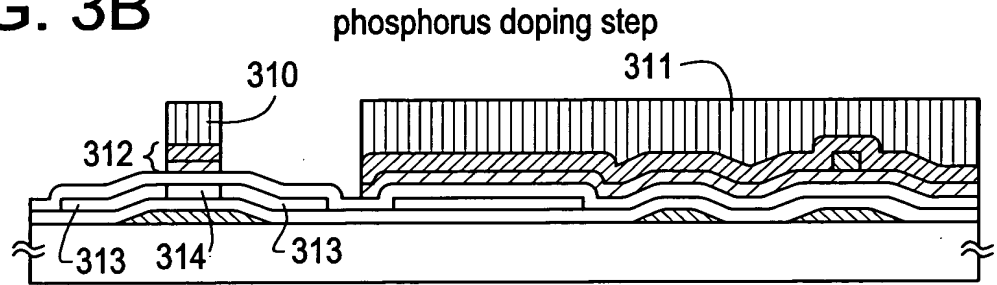


FIG. 3C

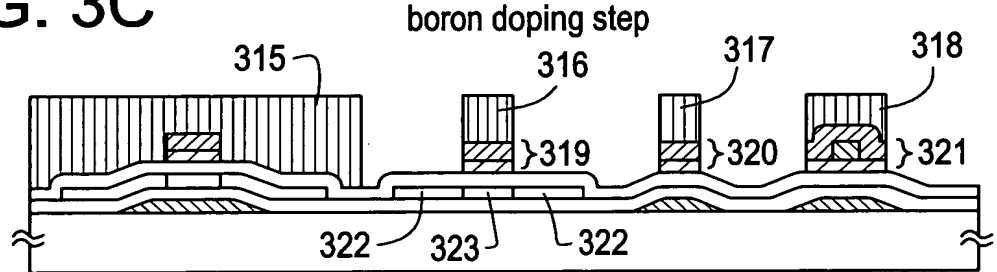


FIG. 3D

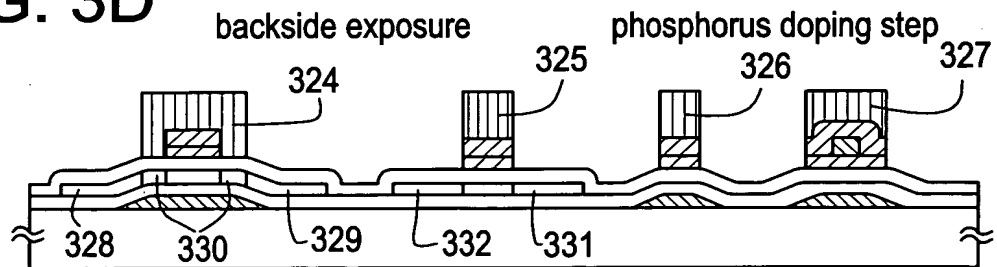


FIG. 3E

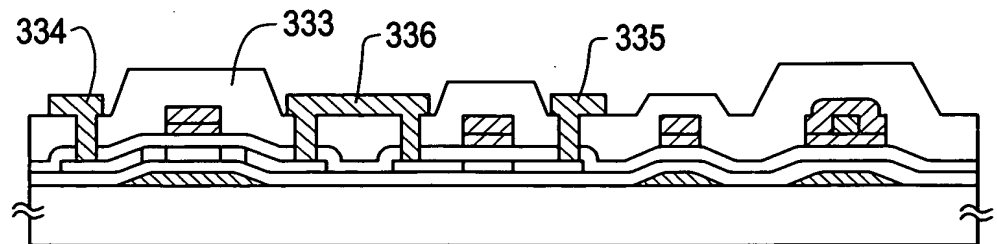


FIG. 4A

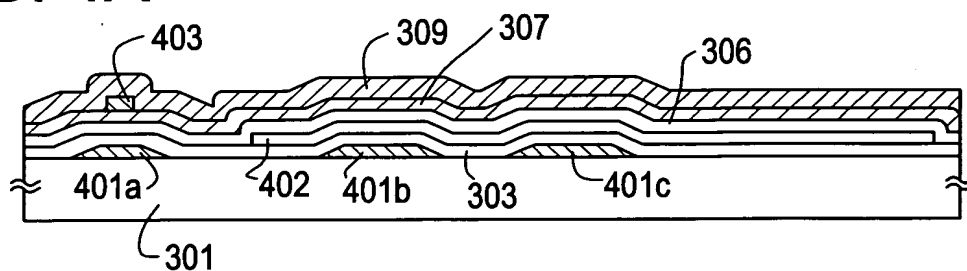


FIG. 4B

phosphorus doping step

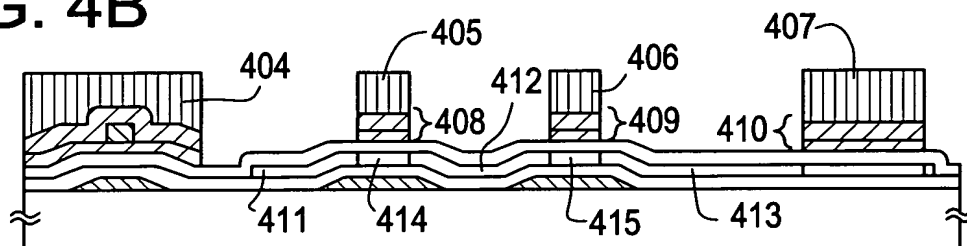


FIG. 4C

boron doping step

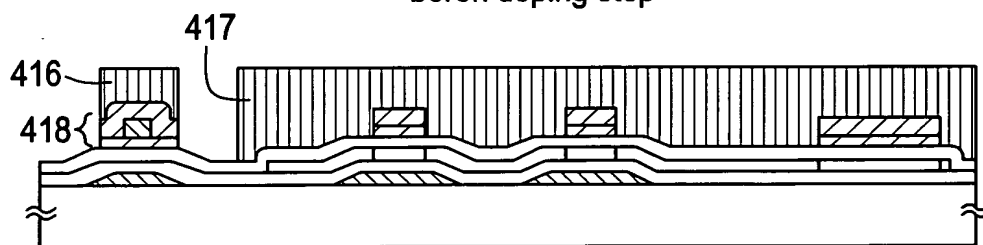


FIG. 4D

backside exposure

phosphorus doping step

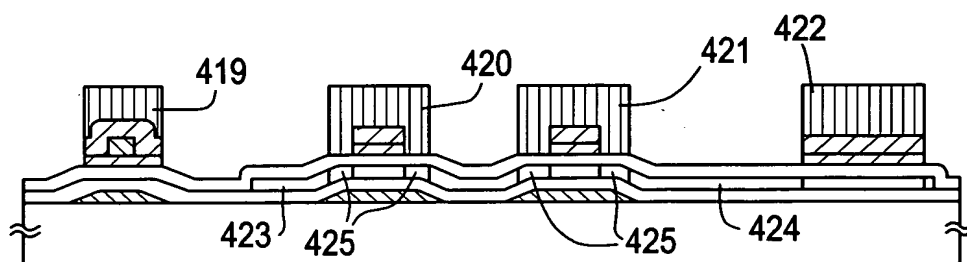


FIG. 4E

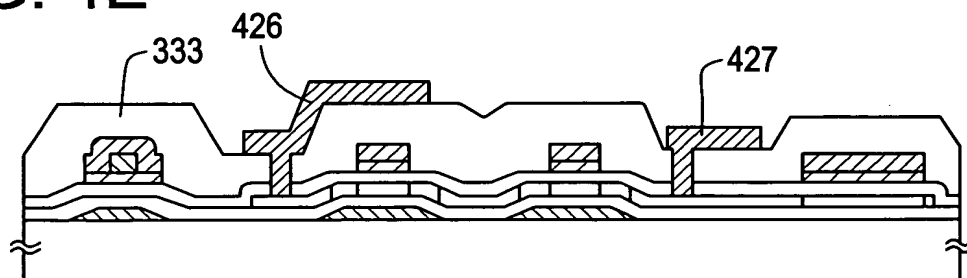


FIG. 5A

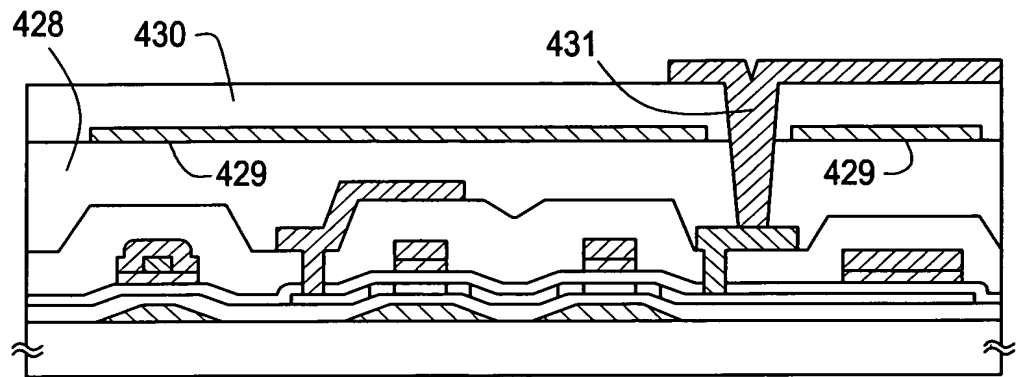


FIG. 5B

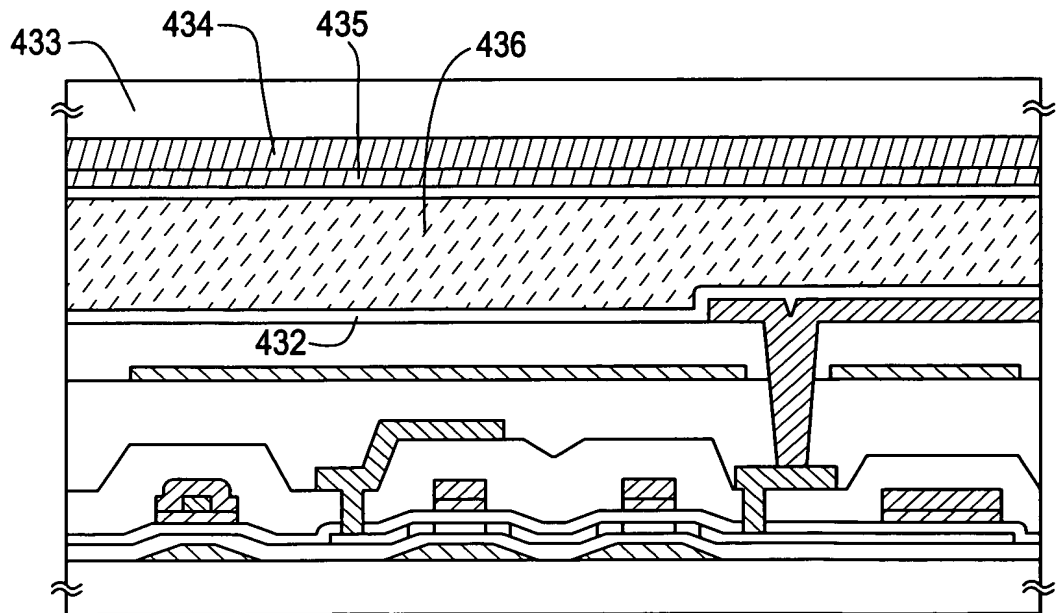


FIG. 6

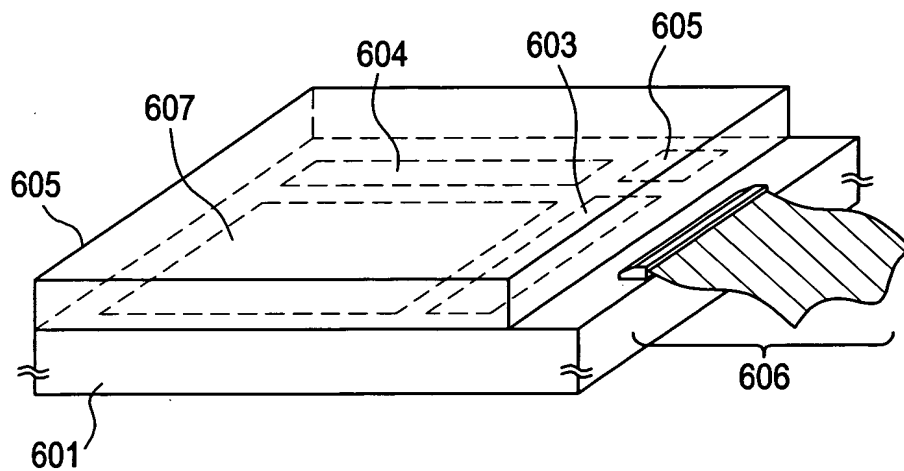


FIG. 7

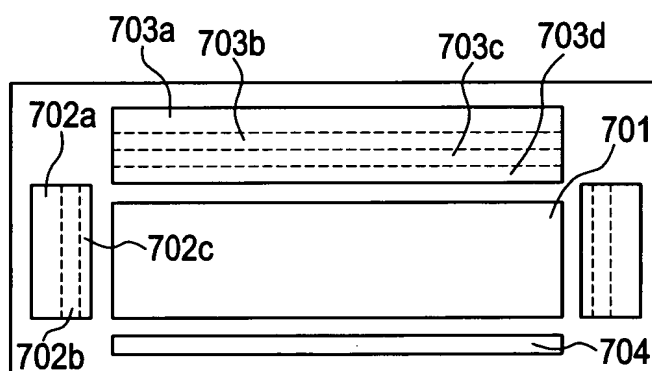


FIG. 8A

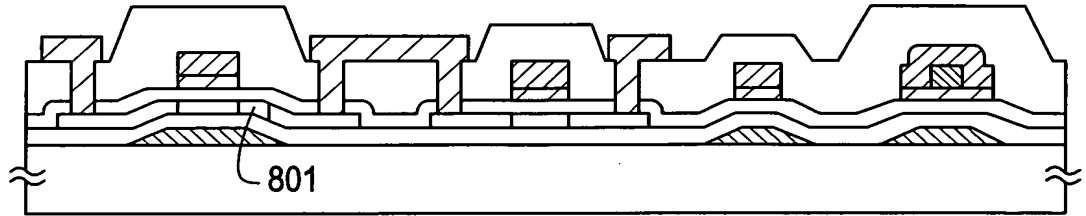


FIG. 8B

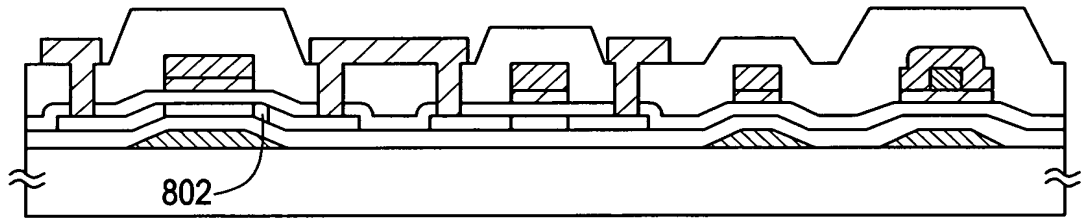


FIG. 8C

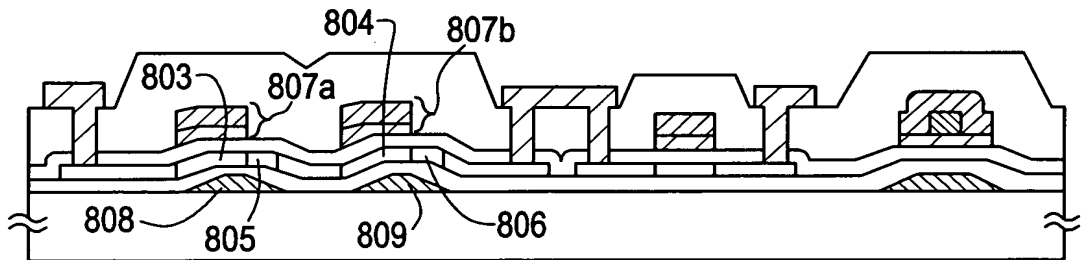


FIG. 8D

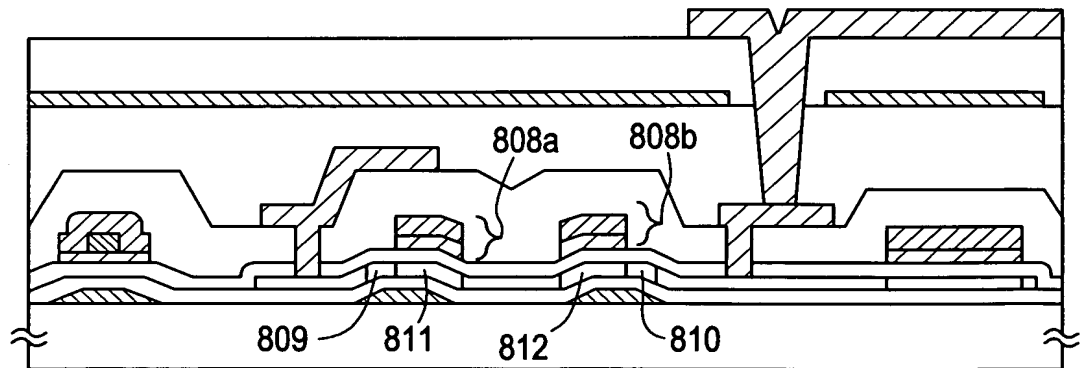
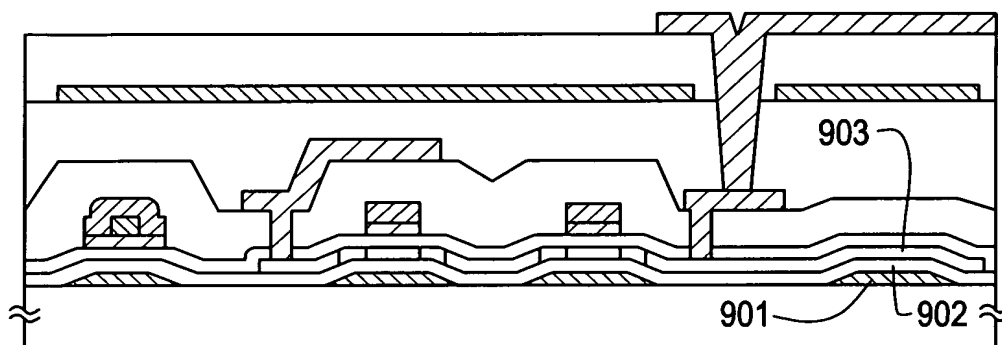


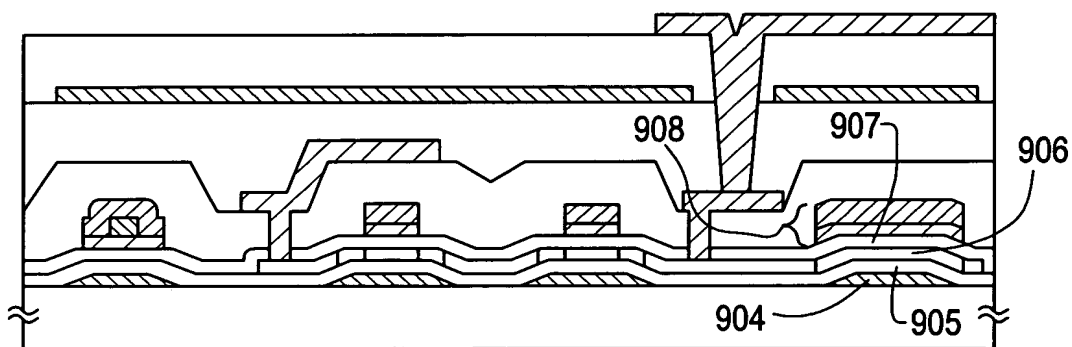
FIG. 9A



pixel TFT portion

storage capacitor portion

FIG. 9B



pixel TFT portion

storage capacitor portion

FIG. 10B

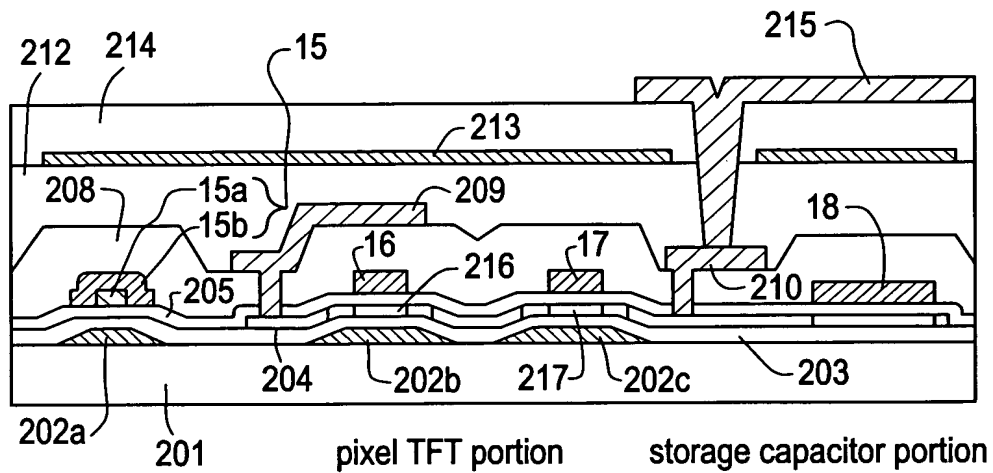


FIG. 11A

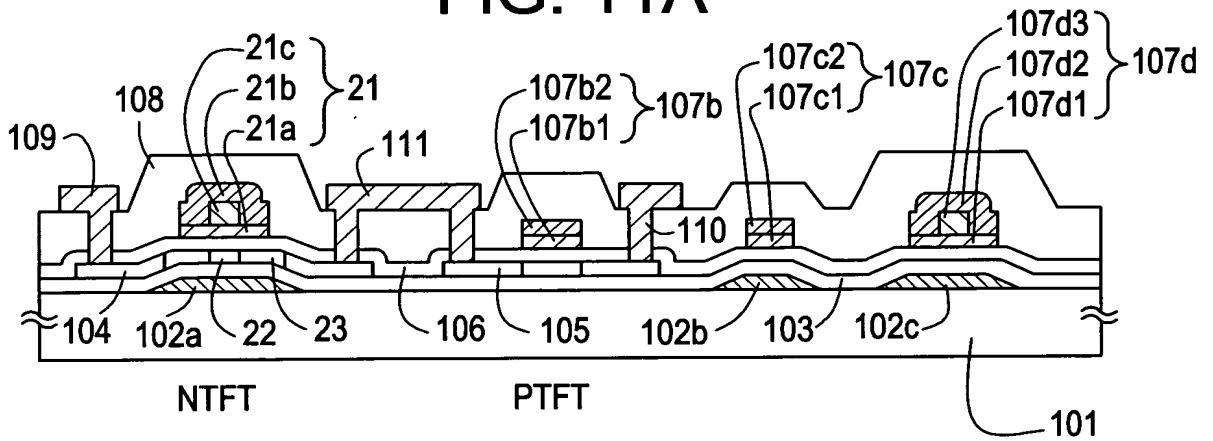
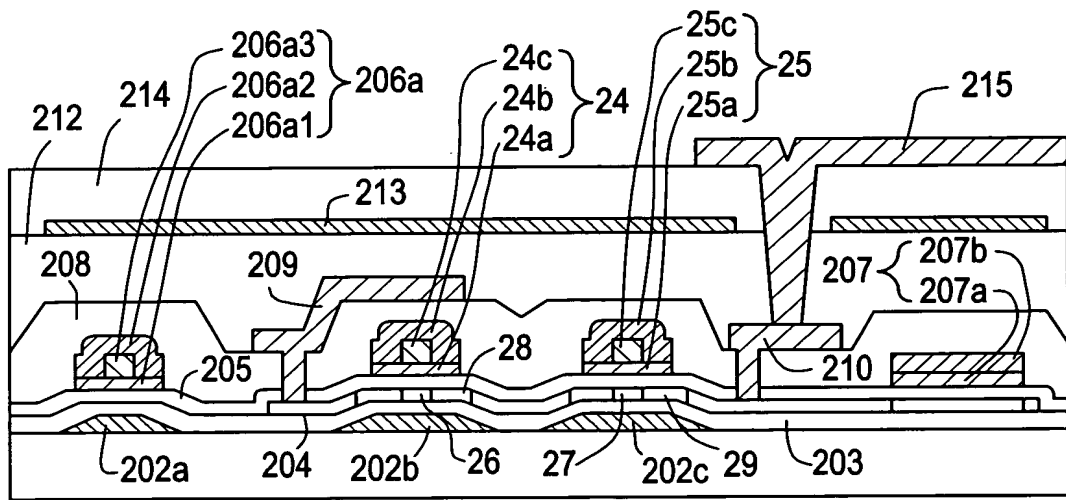


FIG. 11B



pixel TFT portion

storage capacitor portion

FIG. 12A

gettering step by phosphorus

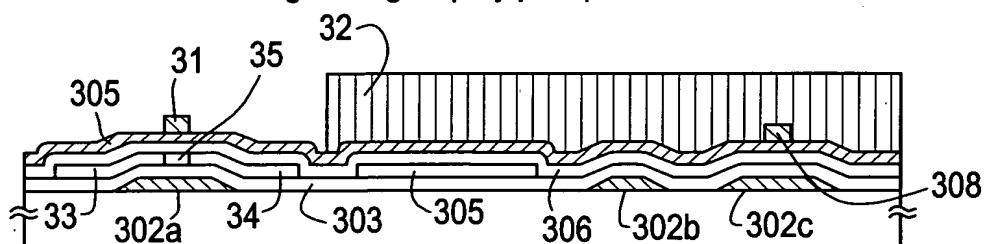


FIG. 12B

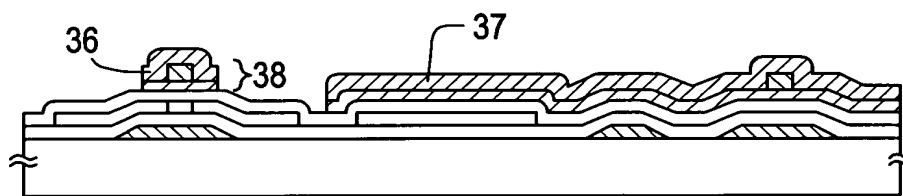


FIG. 12C

boron doping step

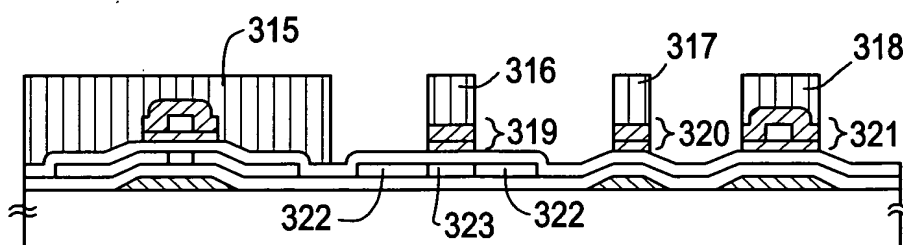


FIG. 12D

back side exposure step

phosphorus doping step

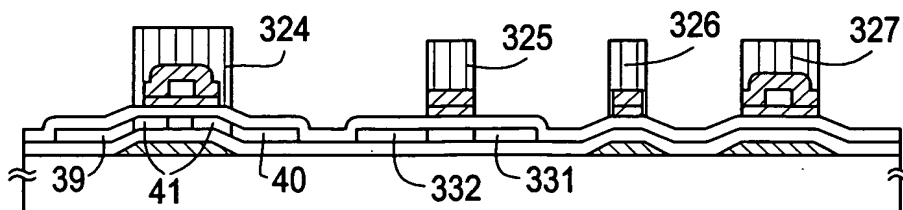


FIG. 14A

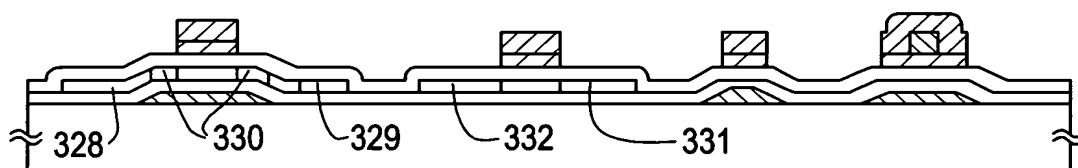


FIG. 14B

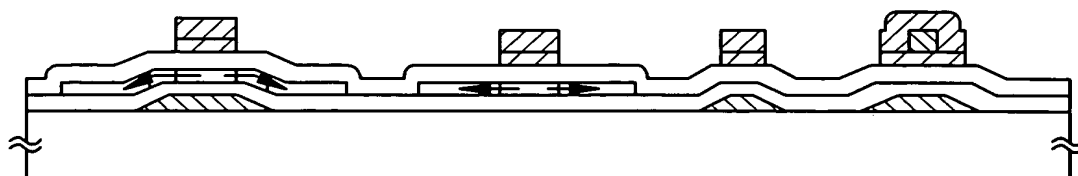


FIG. 15A

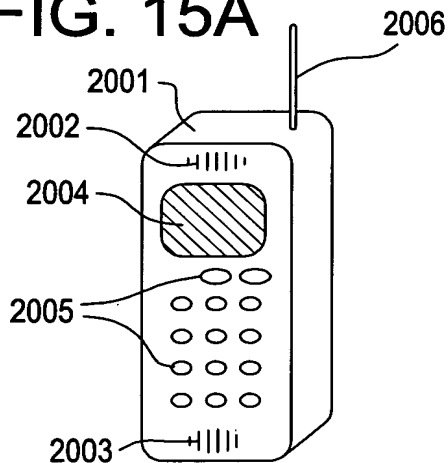


FIG. 15B

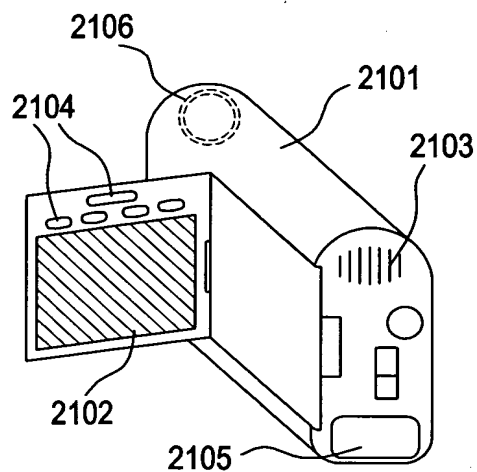


FIG. 15C

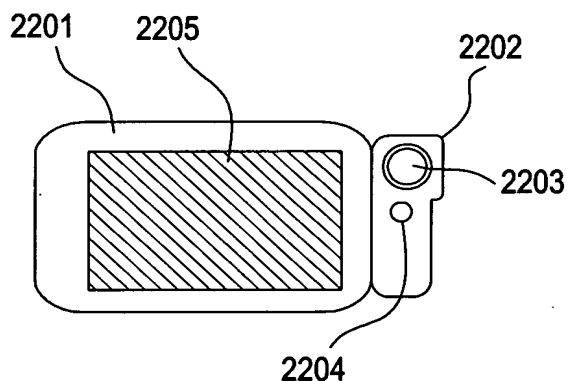


FIG. 15D

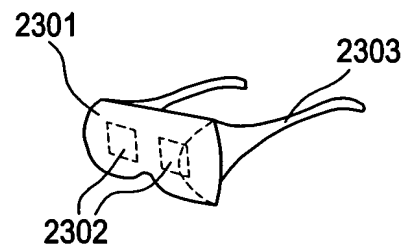


FIG. 15E

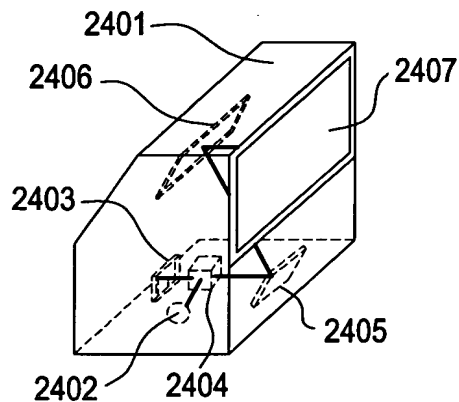


FIG. 15F

